REMARKS

This application has been carefully reviewed in light of the Office Action dated March 9, 2006. Claims 1-6 remain in this application. Claim 1 is the independent Claims. It is believed that no new matter is involved in the amendments or arguments presented herein. Reconsideration and entrance of the amendment in the application are respectfully requested.

Information Disclosure Statement

The Office Action notes the complete copies of the references submitted on April 4, 2005 was not submitted, thus the references were not considered in full.

Accordingly, Applicant is submitting the complete copies of the above references with the present submission. Recordation and consideration of these references are thus respectfully requested.

Double Patenting Rejection

Claim 5 was provisionally rejected under 35 U.S.C. 101 over Claim 5 of copending Application No. 10/799,243. Claims 1-6 were provisionally rejected over Claims 1-6 of the same for nonstatutory obviousness-type double patenting

Art-Based Rejections

Claims 1 and 2 were rejected under 35 U.S.C. § 102(b) over U.S. Patent No. Yamamoto (2002/0007875 A1); Claim 3 was rejected under § 102(b) or § 103(a) over the same; and Claims 4 and 6 were rejected under § 103(a) over the same.

Applicant respectfully traverses the rejections and submits that the claims herein are patentable in light of the arguments below.

The Yamamoto Reference

Yamamoto is directed to R-Fe-B base permanent magnet material. (*See, Yamamoto; Para. 0002*). According to Yamamoto, the R-Fe-B base permanent magnet material include a rare earth-iron-boron magnetic alloy which contains a $Fe_{14}R_2B_1$ primary phase on a volumetric proportion of 87.5 to 97.5%, and a rare earth oxide or a rare earth and transition metal oxide in a volumetric proportion of 0.1 to 3%. (*See, Yamamoto; Para. 0010*).

The Claims are Patentable Over the Cited References

The present application is generally directed to a method for manufacturing an R-T-B system rare earth permanent magnet having R, T, and B.

As defined by independent Claim 1, a method for manufacturing an R-T-B system rare earth permanent magnet includes a sintered body with a composition consisting essentially of 25% to 35% by weight of R (where R represents one or more rare earth elements, providing that the rare earth elements include Y), 0.5% to 4.5% by weight of B, 0.02% to 0.6% by weight of Al and/or Cu, 0.03% to 0.25% by weight of Zr, 4% or less by weight (excluding 0) of Co, and the balance substantially being Fe, is provided. The manufacturing method includes the steps of manufacturing a compacted body containing a low R alloy containing a $R_2T_{14}B$ compound as a main constituent and Zr, and a high R alloy containing, as main constituents, R and T (wherein T represents at least one transition metal element essentially containing Fe, or Fe and Co). The high R alloy contains a higher amount of R than the low R alloy. The compacted body is sintered.

The applied reference does not disclose or suggest the above features of the present invention as defined by the claims. In particular, Yamamoto does not

disclose or suggest, "manufacturing a compacted body containing a low R alloy containing a $R_2T_{14}B$ compound as a main constituent and Zr in order to obtain an R-T-B system rare earth permanent magnet including 0.03% to 0.25% by weight of Zr," as required by independent Claim 1.

The Office Action cites Example 3-2 and 3-4 of Yamamoto as disclosing the features of independent Claim 1. However, the Zr amounts of the sintered body described those examples recite adding 0.39% and 0.45 wt%, respectively, are outside of the range of 0.03 – 0.25 wt% recited in independent Claim 1.

This is of particular relevance since, according to the present application, a magnet having improved magnetic properties is obtained using a low amount of Zr in the manufacturing of the sintered magnet. The manufacturing method of the present invention enables a high dispersion of Zr with the addition of a small amount of Zr. Since the dispersion of Zr is high in the R-T-B system rare earth permanent magnet of the present invention, the R-T-B system rare earth permanent magnet is able to exert the effect to inhibit the grain growth even with the addition of a smaller amount of Zr (*Specification; Page 10, 2nd and 3rd Para.*).

Moreover, the Co amounts in the above mentioned Examples are also outside of the ranges recited in independent Claim 1. According the Specification, that range has the property of avoiding problems with corrosion of the grain boundary phage (*Specification; Page 15, 2nd Para.*).

In contrast, independent Claim 1 requires a method having a lower amount of Zr than Yamamoto. Figure 4 of the Specification illustrates that when additive amount of Zr is increase to 0.3% by weight, the residual magnetic flux density (Br becomes smaller than that of permanent magnet containing no Zr. Thus, when

adding Zr to the low-R alloys, the additive amount of Zr is 0.03-0.25% by weight, and is lower than the ranges cited Examples 3-2 and 3-4 of Yamamoto.

Accordingly, Yamamoto does not disclose nor suggest the features recited in independent Claim 1.

Since the applied reference fails to disclose, teach or suggest the above features recited in independent Claim 1, that reference cannot be said to anticipate or render obvious the invention which is the subject matter of that claim.

Accordingly, independent Claim 1 is believed to be in condition for allowance and such allowance is respectfully requested.

The remaining claims depend either directly from amended independent Claim 1, and recite additional features of the invention which are neither disclosed nor fairly suggested by the applied references and are therefore also believed to be in condition for allowance, and such allowance is respectfully requested.

For example, regarding Claim 3 of the present invention, the Office Action purports that although Yamamoto is silent regarding suitable sintering temperature range and squareness ratio recited in that claim, Yamamoto's alloys would be expected to posses all the same properties as recited in Claim 5. However, Yamamoto discloses the suitable sintering temperature range of 20 degree or 30 degree and the squareness ratio as shown in Tables 1-4 of Yamamoto. Accordingly, Yamamoto does not disclose or suggest the features of Claim 3.

Conclusion

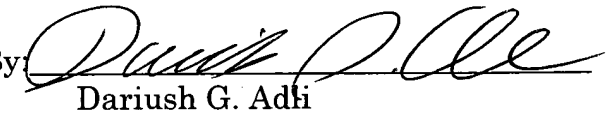
In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 337-6809 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
HOGAN & HARTSON L.L.P.

Date: May 18, 2006

By: 
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